

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
8 July 2004 (08.07.2004)

PCT

(10) International Publication Number  
**WO 2004/056984 A2**

(51) International Patent Classification<sup>7</sup>: C12N 9/00

(21) International Application Number:  
PCT/IB2003/006422

(22) International Filing Date:  
18 December 2003 (18.12.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/434,699 18 December 2002 (18.12.2002) US

(71) Applicants (for all designated States except US):  
UNIVERSITY OF GENEVA [CH/CH]; 24, rue du General-Dufour, CH-1211 Genève 4 (CH). JSC FERMTECH [RU/RU]; 32-2-178 Akademik Kapitsa Street, Moscow, 117647 (RU).

(72) Inventors; and

(75) Inventors/Applicants (for US only): MANEN,

Jean-François [CH/CH]; 53, Chemin de Sur Vaux, Arculinge, F-74930 Reignier (FR). SINITSYN, Arkady [RU/RU]; 6-761 Dovzenko Street, Moscow, 119590 (RU). SINITSYNA, Olga Arkadievna [RU/RU]; 6-761 Dovzenko Street, Moscow, 117647 (RU).

(74) Agents: FORSTMAYER, Dietmar et al.; Boeters & Lieck, Bereiteranger 15, 81541 München (DE).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

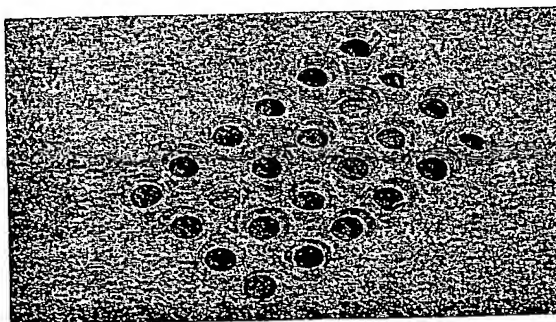
[Continued on next page]

(54) Title: ENZYMATIC METHOD FOR THE ISOLATION OF DNA FROM PLANT TISSUE

## Description of the method

### First step

Small pieces of plant leaves (5 mm in diameter) are placed in a microtiter plate (with flat bottom holes) filled with 50 µl of a cocktail containing different carbohydrases in a DNA preserving medium.



(57) Abstract: The invention relates to a mixture of cell wall degrading enzymes. The invention further relates to methods for isolating DNA from plant tissue that utilize a mixture of cell wall degrading enzymes. The invention also relates to kits for isolating DNA from plant tissue wherein the kit comprises a mixture of cell wall degrading enzymes.



**Published:**

— without international search report and to be republished  
upon receipt of that report

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*